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**From:** JAMES D WALKER  
**Sent:** Fri 7/7/2017 5:08:36 PM  
**Subject:** Summary of notes on the conference call discussion with Excelsior on July 6.  
Attachment R Financial Responsibility Assurance - comments on Excelsior Response in revised permit - 7517.docx

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Hi Kate,

The attached document summarizes my comments on Attachment R of the revised permit application and was the focus of the discussion today.

The following is a summary of the discussion on each of the topics listed in the attachment and related concerns.

### **Attachment R-2, Demonstration of Financial Capability**

Excelsior will provide clarification that separate surety bonds will be provided for the EPA and ADEQ financial assurance requirements. The EPA bond will cover only wellfield closure costs and the ADEQ bond will cover only surface facility and impoundment closure costs. Abandonment costs for the three POC wells open during Stage 1 operations, will be covered by the EPA bond, not the ADEQ bond. Table R3-11 will be corrected accordingly.

### **Attachment R-3, Wellfield Closure Costs**

#### **Fixed Closure Costs**

The specific assumptions about pullback pumping and hydraulic control well drawdown effects were discussed and clarified. Pullback pumping will take place at recovery wells and exceed the drawdown effects of the HC wells in order to reverse outward flow of ISR fluids.

#### **Labor Costs**

Excelsior clarified that pullback pumping would continue If necessary during the step 2 rest period between step 1 and step 3 of the rinsing operations.

#### **Pump Replacement Costs and Power Costs**

Excelsior will correct the possible pumping rate at the two Johnson Camp wells discussed in Attachment A from 200 to 400 gpm to be consistent with the 400 gpm rate expected to be pumped for rinsing purposes discussed in Attachment R-3.

#### **Variable Closure Costs**

#### **Rinsing Verification Sampling**

The text omits discussion of sampling 100 percent of the recovery wells as a demonstration of equivalency to sampling as few as 10 percent of the recovery wells in the first mine block. In addition, The discussion states the 10 percent of the recovery/injection wells will be sampled after step 1 and step 3 rinsing stages, which differs from the revised sampling plan to sample only after step 3 rinsing operations. It was explained that Table R3-8 costs reflect the revised plan to sample 100 percent of recovery wells after step 3 rinsing operations in the first mine block for demonstration purposes. The text will be revised to clarify the discussion of the sampling plan.

### **Post Closure Monitoring**

## **Ex. 5 - Deliberative Process**

### **Electrical Conductivity Monitoring**

The electrical conductivity sensor array issue was discussed at length, with various scenarios presented by Excelsior for a demonstration of a single transducer in comparison to an interval array of EC sensors placed in intermediate monitoring wells or observation well downgradient from the first mine block. Excelsior will submit a proposal for the demonstration plan for EPA consideration by the end of next week.

### **General Topics**

The next conference call is scheduled for July 12 at 1 pm PDT followed by calls every two weeks on Thursday at 10 am PDT. Excelsior inquired about the timetable for receiving a copy of the draft permit. EPA did not offer a definite date for completion of the draft permit other than 6 weeks from receipt of the revised permit application if it is found to be acceptable. That would mean a date in early to mid August. The application is under review by Cadmus Group and the status of that review will be presented in the next conference call. Comments on the revised UIC application and the draft APP are due to EPA on July 14.

**Nancy and David:** If I have omitted or mischaracterized the discussion of any important topic, please feel free to add or correct the above summary.

Thanks,

Jim